

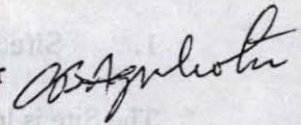
**U. S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT**

I. HEADING

Date: January 6, 2000

Subject: Monroe Township Groundwater Contamination Site, Williamstown,
Gloucester County, New Jersey

From: Chaitanya Agnihotri, On-Scene Coordinator
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Removal Action Branch



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POLREP NO.: 2 (Covers period from 11/26/99 - 12/31/99)

II. BACKGROUND

Site No.: MQ
Delivery Order Number: 003 (ERRS Contract No. 68-S2-99-07)
Response Authority: CERCLA
NPL Status: Non-NPL
CERCLIS Number: NJD98079699
Action Memo Status: Action Memo approved December 6, 1999
Start Date: September 21, 1999
Demobilization Date:
Completion Date:

III. RESPONSE INFORMATION

A. Incident Category

CERCLA incident category: Area-Wide Groundwater Contamination

B. Site Description

1. Site Location

The Site is located in the town of Williamstown, in the Township of Monroe, and consists of properties which use private wells as a source of potable water. The affected properties are located in three areas identified as the Winslow Road Area (including properties on Winslow Road and Maple Street); the Tuckahoe Road Area (consisting of properties on Tuckahoe Road, Sykes Lane and Glassboro Road) and the Black Horse Pike Area (including properties on Black Horse Pike).

2. Description of Threat

EPA became aware of groundwater contamination of private wells in Monroe Township while evaluating groundwater contamination associated with the Township's municipal supply wells. During EPA's evaluation of these municipal wells, the Agency obtained groundwater sampling data from the Gloucester County Health Department (GCHD), which indicated that certain private wells in the Township were contaminated with PCE. In addition, based on discussions with the New Jersey Department of Environmental Protection (NJDEP) and the U.S. Geological Survey (USGS), EPA became aware of groundwater contamination problems in the Township that were associated with Mercury.

C. Preliminary Assessment/Site Inspection Results

In cooperation with both the NJDEP and the GCHD, EPA selected three areas of Monroe in which to perform tap water sampling of private wells. This sampling was performed in order to assess whether the site could be eligible for a removal action, and to determine whether the Site should be proposed for inclusion on the National Priorities List (NPL). These areas were determined based on the locations of previously known elevated concentrations of PCE, and included properties in the areas of the Black Horse Pike, Winslow Road, and the area located in the vicinity of the intersection of Tuckahoe Road with Glassboro Road. The tap water sampling event was performed in July 1999, with approximately 100 homes being sampled. Of these 100 homes, it was found that 29 properties exceeded the federal maximum contaminant levels (MCLs) and removal action levels (RALs) for PCE, Benzene, Mercury, Thallium, Copper, and Lead.

IV. RESPONSE INFORMATION

A. Situation

1. Current Situation

As described above, EPA determined that there were 29 properties at which the tap water exceeded the RALs and MCLs for PCE, Benzene, Mercury, Thallium, Copper, and Lead. A summary of these exceedances is provided in the following table:

Monroe Township Groundwater Contamination Site

MAXIMUM CONCENTRATIONS OF CONTAMINANTS FOUND IN RESIDENTIAL WELLS (ppb)		EPA RAL (ppb)	EPA MCL (ppb)
PCE	1,500	70	5
Benzene	470	100	5
Mercury	19.9	10	2
Copper	3,260	1,300	TT*
Lead	62.6	30	TT*
Thallium	4.0	2	2

* TT - Treatment Technique, as per the Safe Drinking Water Act.

2. Removal Actions to Date

EPA has continued providing bottled water to the homeowners of affected homes. The EPA's Emergency Rapid Response Services (ERRS) contractor (WRSI&E) obtained the services of Shockey's Water Treatment System Company to install point of entry treatment systems (POETs) at the 15 impacted residences. These treatment systems were installed on November 29 and 30, and December 7 and 13, 1999. The following table indicates the address of the 15 residences, the date of installation, and type of treatment system installed in each.

**TABLE 1 - Description of the Treatment Systems Installed
Monroe Township Site
Williamstown, Gloucester County, New Jersey
December 22, 1999**

Address of Residence	Date System Installed	Existing Treatment System	Description of the New Treatment System Installed
2990 South Black Horse Pike	11/29/99	None	pH Adjustment unit and two Carbon Units
2998 South Black Horse Pike	12/07/99	None	pH Adjustment unit and two Carbon Units
3042 South Black Horse Pike	11/30/99	Water softener unit which was removed from service	pH Adjustment and two carbon units
3132 South Black Horse Pike	11/29/99	Water Softener Unit (also adjusts the pH)	Serviced the Water Softener and pH Adjustment Unit (added 100 pounds of limestone), and added a KDF-55 Unit and two Carbons Units
3172 South Black Horse Pike	12/07/99	None	pH Adjustment unit and two Carbon Units
3235 South Black Horse Pike	11/29/99	None	pH Adjustment Unit and two Carbon Units
3331 South Black Horse Pike	11/30/99	Water Softener (also adjusts the pH)	Serviced the Water Softener and pH Adjustment Unit and added a KDF-55 Unit
3339 South Black Horse Pike	11/29/99	None	pH Adjustment Unit and KDF-55 Unit

**TABLE 1(Continued) - Description of the Treatment Systems Installed
Monroe Township Site
Williamstown, Gloucester County, New Jersey
December 22, 1999**

Address of Residence	Date System Installed	Existing Treatment System	Description of the New Treatment System Installed
3345 South Black Horse Pike	12/13/99	None	pH Adjustment and KDF-55 Unit
3370 South Black Horse Pike	11/29/99	None	pH Adjustment unit and KDF-55 Unit
3524 South Black Horse Pike	11/30/99	Water Softener unit which was removed from service	pH Adjustment Unit and KDF-55 Unit
647 Tuckahoe Road	11/29/99	Water Softener Unit (also adjusts the pH)	Serviced the Water Softener and added a pH Adjustment Unit and two Carbon Units
607 Winslow Road	11/29/99	Water Softener Unit (also adjusts the pH)	Serviced the Water Softener and pH Adjustment Unit (replaced the timer and added 70 pounds of limestone), and added two Carbon Units
616 Winslow Road	12/07/99	None	pH Adjustment unit and two Carbon Units
Maple Street	12/07/99	None	pH Adjustment unit and two Carbon Units

WRSI&E also collected samples from the residences which had POET treatment systems installed. These samples were collected on November 30 and December 1 and 8, 1999 and December 20 and 21, 1999. The following number of samples were collected and submitted for the indicated analysis:

Date Collected	Analytical Parameter	Number of Samples
11/30/99	PCE	21
	pH	12
	Hg	13
12/01/99	PCE	6 (plus one MS/MSD)
	pH	6
	Hg	9 (plus one MS/MSD)
12/08/99	Benzene	7 (plus one MS/MSD)
	PCE	24 (plus two MS/MSD)
	pH	10
12/20/99	Benzene	7 (plus one MS/MSD)
	PCE	33 (plus 2 MS/MSD)
	Hg	17 (plus one MS/MSD)
	pH	23
12/21/99	PCE	17 (plus one MS/MSD)
	Hg	11 (plus one MS/MSD)
	pH	9

Additionally, it should be noted that EPA-retained the services of a Superfund Technical Assessment and Response Team (START) contractor to perform sampling at residences in which elevated concentrations of Lead, Copper, and Thallium were detected, to determine the source of these contaminants (i.e., whether the source is the residential plumbing).

The groundwater from five residences were resampled and analyzed for thallium at a 1.84 part per billion (PPB) detection limit. The results from these samples indicated the thallium was not detected at this detection limit. Based on these results, the five residences are no longer provided bottled water.

3. Enforcement

No Federal enforcement action is in progress at this time. Should a responsible party or parties be identified and be willing to undertake a timely and appropriate removal action, then EPA will evaluate its options with regard to enforcement.

B. Planned Removal Activities

The planned removal activities consist of continuing to provide an alternate water supply (i.e., bottled water) to the 15 properties in the Tuckahoe Road, Winslow Road, and Black Horse Pike areas where the federal MCLs and RALs for Benzene, PCE, and Mercury are exceeded. Also, bottled water will continue to be provided to properties where the MCLs and RALs for Thallium, Lead, and Copper are exceeded, until such time that EPA can determine the sources of this contamination.

Additionally, installation of point of entry treatment systems (POETS) will be performed at the 15 properties with MCL and RAL exceedances for Benzene, PCE, and Mercury. The treatment systems will use GAC for removal of PCE and Benzene, and a bimetallic compound for the removal of Mercury. The systems will be monitored and maintained, including periodic sampling of the water to assure proper functioning.

Through the use of START, EPA will also be performing sampling of additional homes in Williamstown, in order to better refine the nature and extent of the groundwater contamination.

C. Next Steps

The next activities include the quarterly sampling of the water being treated at the 15 residences. This will occur in mid to late March 2000. The OSC and the Emergency and Rapid Response Services (ERRS) contractor will mobilize to the site to collect the samples with START personnel monitoring the sampling event.

D. Key Issues

There were no key issues during the reporting period covered by this Pollution Report.

V. COST INFORMATION (to 12/31/99)

COSTS TO DATE (rounded)

ERRS	\$ 12,000
EPA	\$ 5,000
START	\$ 8,000
Total	\$ 25,000

Percent of the total project ceiling - 10 %

The above accounting of expenditures is an estimate based on figures known to the OSCs at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI. DISPOSAL OF WASTES

This section is not applicable for the period addressed by this Pollution Report.